CLAIMS

1. A method of rehabilitation using an actuator type that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume, comprising:

exercising a patient at a first place of rehabilitation selected from a bed, a wheel-chair, a clinic and a home, using an actuator of said actuator type which interacts with a motion of said patient; and

second exercising said patient at a second place of rehabilitation selected from a bed, a wheel-chair, a clinic and a home using a second actuator of said actuator type which interacts with a motion of said patient;

wherein said first exercising and said second exercising utilize a same movement mechanism design for moving the actuators.

2. A method according to claim 1, wherein said first and said second exercising are performed using a same rehabilitation apparatus.

3. A method according to claim 1, wherein said motion mechanism is motorized.

4. A method according to claim 3, wherein said motion and said force are controlled by a controller.

5. A method according to claim 3, wherein said motion mechanism is capable of applying a force of at least 10 Kg to a tip of said actuator.

6. A method according to claim 3, wherein said motion mechanism is capable of applying a force of different magnitudes in different directions of motion said actuator.

7. A method according to claim 1, wherein said motion mechanism is adapted to apply selective resistance to motion of said actuator.

8. A method according to claim 1, wherein said actuator is adapted to interact with said motion in a plurality of modes including at least causing said motion, guiding said motion and recoding said motion.

9. A method according to claim 8, wherein said first and said second exercising use different motion interaction modes.

10. A method according to claim 1, wherein at least one of said first and said second exercising are performed in water.

11. A method according to claim 1, wherein said first and said second exercising are performed on a same limb.

12. A method according to claim 1, wherein said first and said second exercising are different exercises.

13. A method according to claim 1, comprising keeping track of progress of said patient including said first and said second exercising, in a same controller coupled with said second actuator.

14. A method according to claim 1, wherein said actuator is rigid.

15. A method of rehabilitation using an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume, comprising:

exercising a first organ type of a patient using said actuator; and

exercising a second organ type of the patient using said actuator.

16. A method according to claim 15, comprising replacing an attachment to said patient of said rehabilitation device between said exercising.

17. A method according to claim 15, the actuator comprises a controller which controls said interaction.

18. A method according to claim 17, wherein said controller is programmed with a plurality of different exercises for different limbs

19. A method according to claim 15, comprising adjusting at least one of a spatial position and orientation of said actuator relative to said patient, between said exercises.

20. A rehabilitation kit, comprising:

an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

a tip on said actuator; and

a plurality of attachments modularly exchangeable for said tip, at least two of which are adapted to fit different organs.

21. A kit according to claim 20, wherein at least one of said attachments is powered via said actuator.

22. A kit according to claim 20, wherein at least one of said attachments is capable of rotation in three axes of rotations.

23. A device for rehabilitation, comprising:

a motorized actuator adapted to support a movement by a person by at least one of resisting motion, guiding motion and causing motion; and

a controller configured to control said actuator,

wherein, said controller is programmed to provide rehabilitation exercising for patient's switchable between a plurality of modes in which one or more or motivation, cognitive ability and motor ability is either high or low.

24. A device according to claim 23, wherein said controller is configured to provide

instructions in a selectable one of at least three information presentation modes and complexity levels.

25. A device according to claim 23, wherein said controller is configured to provide support for motor activity of said patient in a selectable one of at least three levels of assistance.

26. A device according to claim 23, wherein said controller is configured to provide incentive feedback to said patient in a selectable one of at least three levels of incentive.

27. A method of rehabilitation using an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume, comprising:

coupling said actuator to a person in a home setting;

performing a daily activity by said person, wherein said actuator interacts with said activity to enhance rehabilitation.

28. A method according to claim 27, wherein said daily activity is outdoors

29. A method according to claim 27, wherein said actuator interacts using a stored rehabilitation plan.

30. A method according to claim 27, wherein said actuator reports to a remote location on a progress of rehabilitation.

31. A method according to claim 27, wherein said actuator prevents unsafe motions by said patient.

32. A method according to claim 27, comprising first practicing said daily activity at a rehabilitation clinic.

33. A method of rehabilitation, comprising:

rehabilitating a first patient on a first rehabilitation device;

rehabilitating a second patient on a second rehabilitation device; and

passing information regarding rehabilitation between said two devices, said information including at least one of a score, current progress, spatial position of a portion of the patient and a game play.

34. A method according to claim 33, wherein said patients play a game together using said devices for input and output.

35. A method according to claim 34, wherein said patients play against each other.

36. A method according to claim 34, wherein said first rehabilitation device provides a different support fro said first patient than said second device supplies for said second patient, to compensate for differences in ability between the two patients.

37. A method according to claim 33, wherein said information is passed in real-time.

38. A method according to claim 33, wherein said information is passed using a wireless connection.

39. A method according to claim 33, comprising monitoring said first and said second patients by a remote therapist.

40. A method according to claim 33, comprising remotely connecting into a therapy group by said patients.

41. A method according to claim 33, wherein said two devices are in a same room.

42. A rehabilitation system configuration, comprising:

A first rehabilitation device; and

A second rehabilitation device linked by a wireless data link with said first rehabilitation device such that the two rehabilitation devices can act in synchrony.

43. A method of cooperative rehabilitation, comprising:

providing a first actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

providing a second actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;

engaging said first and said second actuators by a patient and by a non-therapist, respectively; and

rehabilitating said patient using said first actuator and said non-therapist.

44. A method according to claim 43, wherein said non-therapist is a blood relative.

45. A method according to claim 43, comprising guiding said non-therapist and said patient by instructions by a controller.

46. A method according to claim 43, wherein said non-therapist is under an age of 18.

47. A method according to claim 43, wherein said non-therapist is under an age of 10.

48. A method according to claim 43, wherein said providing is at a home of said non-therapist.

49. A method according to claim 43, wherein said non-therapist has fewer than 50 hours experience in physical therapy.

50. A method according to claim 43, wherein said non-therapist has fewer than 10 hours experience in physical therapy.